# Cardiovascular Disease Prevention and Care Report

2003

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### **Executive Summary**

#### **Introduction:**

Together, the Arkansas Foundation for Medical Care (AFMC) and the Arkansas Department of Health's Cardiovascular Health Program conducted a study in regards to the cardiovascular health and physician practices of the Medicaid population. The Tobacco Prevention and Education Program and the Arkansas Department of Health's Cardiovascular Health Program funded the study. The overall cardiovascular study was comprised of two sections. The first section was a health site interview with office managers/head nurses for the facilities/clinics of selected Medicaid recipients. The chart abstraction section used the recipient's medical records to obtain health information in order to complete the chart abstraction tool. Area review coordinators (ARCs), employed by AFMC, conducted the interview and reviewed the recipient's charts. This study was conducted to get information about cardiovascular disease prevention and care practices in Arkansas.

The procedures and interviews for the study were based on those utilized in a similar study completed by the Massachusetts Department of Public Health in June 2002. Objectives for the interview section of the study included: describing the health site setting; measuring the use of clinical systems for cardiovascular disease prevention, including counseling, health screenings, and referral to specialized services; measuring the usage of training and assessment systems for primary care providers; measuring the availability of patient educational material for cardiovascular health; and measuring the development of secondary prevention services for patients with known chronic diseases. The chart abstraction tool was created to obtain information about the patient's cardiovascular health, including the presence of key risk factors, and to gain information on the advice given to that patient by the physician.

## **Cardiovascular Study Methodology**

#### **Chart Abstraction**

The target population consisted of Medicaid recipients who were non-disabled 40 year olds or older, excluding pregnant women. Recipients also had to have an office visit between July 1, 2001, and June 30, 2002. The recipients were identified through the Arkansas Medicaid Management Information System (MMIS). Chart abstraction was preformed on all 631 recipients in the population. During the chart abstraction process, 13 of the charts were not available. Therefore, 618 chart abstracts were used for data analysis.

Chart Abstraction	2003
Abstract Sample Size	631
Unavailable Charts	13
<b>Usable Abstracts</b>	618
Response Rate	97.94%

#### **Health Site Interview**

Health sites considered for the study were chosen based on where the recipients' office visits occurred. These facilities had at least one physician and 5 or more recipients that met the chart abstraction selection criteria. Health site interviews were conducted at 49 different statewide facilities or clinics. Two facilities decided not to participate in the interview portion of the study.

Health Site Interview	2003
Interview Sample Size	49
<b>Total Interviews Returned</b>	49
Cooperation Rate	100.00%
<b>Usable Interviews</b>	47
Response Rate	95.92%

A letter for the interview section was written on AFMC letterhead and signed by the Director of the Office of Projects & Analysis. Facilities who were part of the study received the letter describing who should be the interviewee, explaining the content of the interview, and the importance of completing it. A letter was also created for the facilities informing them about the collection of data on their patients that were part of the cardiovascular study. This chart abstraction letter was written on the State of Arkansas' Division of Medical Services (DMS) letterhead and signed by the interim Director of DMS. Both letters thanked the facilities for their support and encouraged participation in the study.

#### **Study Timetable:**

Data collection for the chart abstraction and the health site interview took place between January 20, 2003 and May 10, 2003.

Interview Letters mailed	January 20, 2003
Chart Abstraction Letter mailed	January 20, 2003
Second Letter mailed	March 3, 2003

Data Collection Start date February 5, 2003
Data Collection End date May 10, 2003

At the end of this selected time frame, the analysis process began. The facilities that refused to participate in the interview section were excluded from the analysis of the health site interview, but the facilities' chart abstracts were not eliminated from the chart abstraction analysis. Also, if a recipient's medical chart was unavailable or could not be found at a facility, the chart abstract was deselected from the study and not included in the chart abstract analysis. But, that facility's interview was still included in the health site interview analysis.

#### **Health Site Interview and Chart Abstract Tracking:**

A unique number was assigned to each interview and to each chart abstract for tracking purposes only. This tracking number was used so we could determine which interviews or chart abstracts were already completed and returned. Recipient and facility confidentiality were never compromised.

### **Key Results:**

#### 1. Correlation Between Health Site Interview and Chart Abstract

- 21 facilities have a system in place to continually assess and monitor patients' knowledge of healthy nutrition behaviors, nutrition practices, appropriate physical activity recommendations, physical activity practices/patterns, or tobacco use. From these facilities, 72.8% (214/294) have an average blood pressure less than 140/90, compared to 60.2% (195/324) at facilities that do not have a system in place to continually assess and monitor patients' knowledge of healthy nutrition behaviors, nutrition practices, appropriate physical activity recommendations, physical activity practices/patterns, or tobacco use.
- Tobacco prevention/cessation assessment or tobacco prevention/cessation counseling are part of 26 facilities' cardiovascular disease prevention practices. 44.3% of smokers in these facilities were advised to quit smoking, while 12.9% were referred to a smoking cessation program or pharmacotherapy. At facilities that did not have tobacco prevention/cessation assessment or tobacco prevention/cessation counseling as part of their facilities' cardiovascular disease prevention practices, 38.6% of smokers were advised to quit smoking, while 8.9% were referred to a smoking cessation program or pharmacotherapy.
- 24 facilities have a system in place to follow-up on an individual's behavior change if the patient is previously identified as having unhealthy cardiovascular behaviors. Of smokers at these facilities, 39.6% (44/111) were advised to quit smoking and only 6.3% (7/111) were referred to a cessation program.
- 33 health sites have a system or policy to automatically assess/screen blood pressure of adult patients (without CVD) over 20 years old for risk of cardiovascular disease. From these facilities, 98.2% (439/447) had their blood pressure recorded at least once during their visits.
- 11 health sites indicated they have a system or policy to automatically assess/screen BMI of adult patients (without CVD) over 20 years old for risk of cardiovascular disease. Out of 135 cases in those sites, only 10 had a BMI documented in the chart.
- A defined process (e.g. registry or database) to identify all patients with hyperlipidemia is present in 22 facilities. 76.9% of diabetics at these facilities had a HbA1C test done in the past year.

#### 2. Health Site Interview

- At the 47 facilities, only 3 registered dietitians, 2 tobacco control specialists, and zero exercise specialist are employed.
- 39 facilities see an average of over 50 patients per day.
- 76.60% (36/47) of interviewed health sites do not have a system or policy to automatically inform patients of their 10-year risk for developing cardiovascular disease.

- Only 38.30% (18/47) of interviewed facilities have a system in place to continuously assess and monitor patients' knowledge of tobacco use.
- The following table defines the percentage of facilities that have a defined process or system of prompts to remind providers to include the topics as part of cardiovascular disease prevention:

<b>Topics</b>	Assessment	Counseling
Physical Activity	44.68 %	34.04 %
Nutrition	51.06 %	38.30 %
Weight Management	53.19 %	38.30 %
Tobacco Prevention/cessation	51.06 %	44.68 %
Lipid Profile	68.09 %	59.57 %
Hypertension	72.34 %	63.83 %
Diabetes	61.70 %	59.57 %

Top 3 Barriers to Providing Preventative Cardiovascular Health Counseling to Patients at Health Site by the Number of Physicians in Facility

#### Less than 5 physicians in facility

- Lack of patient compliance (17)
- Lack of time during patient-provider encounters (12)
- Lack of non-clinical providers available for counseling (10)

#### 5-10 physicians in facility

- Lack of patient compliance (10)
- Insufficient or lack of reimbursement for counseling activities (9)
- Patient disinterest and lack of time during patient-provider encounters (5)

#### 11-20 physicians (all tied)

- Lack of time during patient-provider encounters (3)
- Patient disinterest (3)
- Lack of patient compliance (3)
- Insufficient or lack of reimbursement for counseling activities (3)

#### 21-30 physicians

- Patient disinterest and lack of patient compliance (4)
- Lack of time during patient-provider encounters and insufficient or lack of reimbursement for counseling activities (2)

#### 30+ physicians

- Lack of patient compliance (4)
- Patient disinterest and lack of time during patient-provider encounters (3)
- Insufficient or lack of reimbursement for counseling activities (1)

#### 3. Chart Abstraction

- 39.00% (241/618) had a documented smoking status
- Among smokers
  - 41.91% (101/241) had documentation of advice to quit smoking
  - 11.20% (27/241) received a referral to a smoking cessation program or pharmacotherapy
- % with the following risk factors documented at last visit
  - 95.15% had blood pressure (BP) documented at last visit
  - 2.43% had body mass index (BMI) documented at last visit
  - 73.95% had pulse documented at last visit
- 66.18% (409/618) with BP <140/90
- 30.00% ( 24/80 ) of diabetics with BP < 130/80
- 38.46% ( 5/13 ) of those with renal failure with BP < 130/85
- 18.45% (114/618) had a fasting serum lipoprotein profile in past year
- 25.22% (29/115) of those with CAD take aspirin on a regular basis
- 11.97% (74/618) were advised to be more physically active
- 5.34% (33/618) were advised to eat more fruits and vegetables
- 11.00% (68/618) were advised to eat fewer high fat or high cholesterol foods
- 15.70% (97/618) had a fasting blood glucose in past year

The table below describes the percentage of patients with a BMI greater than 30 who received or did not receive advice about the following topics:

<b>Topics</b>	<u>Did receive</u>	<b>Did Not Receive</b>
Be more physically active	25.00 %	75.00 %
Eat more fruits and vegetables	12.50 %	87.50 %
Eat fewer high fat or high cholesterol foods	22.73 %	77.27 %
Reduce sodium intake	11.36 %	88.64 %

## Frequency of Chart Abstraction

Does the patient have Coronary Artery Disease?			
Frequency Percent			
No	550	89.00	
Yes, Dr. Documentation <sup>1</sup>	62	10.03	
Yes, Chart Evidence <sup>2</sup>	6	0.97	

Does the patient have Cerebrovascular Disease?			
Frequency Percer			
No	603	97.57	
Yes, Dr. Documentation <sup>1</sup>	13	2.10	
Yes, Chart Evidence <sup>2</sup>	2	0.32	

Does the patient have Peripheral Vascular Disease?			
Frequency Percen			
No	581	94.01	
Yes, Dr. Documentation <sup>1</sup>	18	2.91	
Yes, Chart Evidence <sup>2</sup>	19	3.07	

Does the patient have Renal Insufficiency?			
Frequency Percen			
No	605	97.90	
Yes, Dr. Documentation <sup>1</sup>	11	1.78	
Yes, Chart Evidence <sup>2</sup>	2	0.32	

<sup>1</sup> Dr. Documentation refers to documentation of a cardiovascular disease diagnosis written by the patient's physician in the patient's medical records.

<sup>2</sup> Chart Evidence may include a copy of reports from or tests performed by another physician/facility, notes from other health

<sup>&</sup>lt;sup>2</sup> Chart Evidence may include a copy of reports from or tests performed by another physician/facility, notes from other health care providers, etc for the selected time period. This evidence showed a diagnosis of a cardiovascular disease. Abstractors of data in no way assumed a diagnosis of a cardiovascular disease unless there was written documentation in the patient's medical record.

Does the patient have Heart Failure?			
Frequency Percent			
No	593	95.95	
Yes, Dr. Documentation <sup>1</sup>	24	3.88	
Yes, Chart Evidence <sup>2</sup>	1	0.16	

Is there family history of Cardiovascular Disease?			
Frequency Perce			
No	416	67.31	
Yes	202	32.69	

Is the patient diabetic?			
Frequency Percent			
No	538	87.06	
Yes, Dr. Documentation <sup>3</sup>	79	12.78	
Yes, Chart Evidence <sup>4</sup>	1	0.16	

If diabetic, was a HbA1C done in the last year?		
	Frequency Percent	
No	19	23.75
Yes	61	76.25

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<sup>&</sup>lt;sup>1</sup> Dr. Documentation refers to documentation of a cardiovascular disease diagnosis written by the patient's physician in the patient's medical records.

<sup>&</sup>lt;sup>2</sup> Chart Evidence may include a copy of reports from or tests performed by another physician/facility, notes from other health care providers, etc for the selected time period. This evidence showed a diagnosis of a cardiovascular disease. Abstractors of data in no way assumed a diagnosis of a cardiovascular disease unless there was written documentation in the patient's medical record.

<sup>&</sup>lt;sup>3</sup> Dr. Documentation refers to documentation of diabetes written by the patient's physician in the patient's medical records.

<sup>4</sup> Chart evidence may include a copy of reports from or tests performed by another physician/facility, notes from other health care providers, etc for the selected time period. This evidence showed a diagnosis of diabetes. Abstractors of data in no way assumed a diagnosis of diabetes unless there was written documentation in the patient's medical record or the patient was taking insulin or a medication for diabetes by mouth.

Is the patient a documented smoker?		
	Frequency Percent	
No	377	61.00
Yes	241	39.00

Was the patient advised to quit smoking?		
Frequency Percent		
No	140	58.09
Yes	101	41.91

Was the patient referred to a smoking cessation program or pharmacotherapy?		
	Frequency	Percent
No	214	88.80
Yes	27	11.20

What was the patient's height at the most recent visit?		
Height	Frequency	Percent
Not Documented	449	72.65
Less than 60 inches	2	0.32
60 - 64.5 inches	72	11.65
65 - 71 inches	87	14.08
72+ inches	8	1.29

What was the patient's weight at the most recent visit?		
Weight	Frequency	Percent
Not Documented	35	5.66
1 - 99 Pounds	8	1.29
100 - 149 Pounds	137	22.17
150 - 199 Pounds	236	38.19
200 - 299 Pounds	183	29.61
300 or more Pounds	19	3.07

Of the office visits selected, what was the percentage at which Blood Pressure (BP) was documented?		
BP %	Frequency	Percent
0%	30	4.85
0 - 49.9%	5	0.81
50 - 74.9%	44	7.12
75 - 99.9%	34	5.50
100%	497	80.42
100+ %	8	1.29

Of the office visits selected, what was the percentage at which BMI (Body Mass Index) was documented?		
BMI %	Frequency	Percent
0%	603	97.57
0 - 9.9%	1	0.16
10 - 39.9%	5	0.81
50+ %	9	1.46

Of the office visits selected, what was the percentage at which Pulse was documented?		
Pulse %	Frequency	Percent
0%	161	26.05
0 - 24.9%	9	1.46
25 - 49.9%	19	3.07
50 - 74.9%	46	7.44
75 - 99.9%	20	3.24
100%	362	58.58
100+ %	1	0.16

Did the patient have a Serum Lipoprotein Profile done in past year?		
	Frequency	Percent
No	504	81.55
Yes	114	18.45

Did the patient have a Fasting Serum Lipoprotein Profile done in past year?		
	Frequency	Percent
No	533	86.25
Yes	85	13.75

Did the patient have a Blood Glucose Lab Test done in past year?		
Frequency Percent		
No	395	63.92
Yes	223	36.08

Did the patient have a Fasting Glucose done in past year?		
	Frequency	Percent
No	521	84.30
Yes	97	15.70

Is there documentation that patient was advised to Be More Physically Active?			
Frequency Percer			
No	544	88.03	
Yes	74	11.97	

Is there documentation that patient was advised to Eat More Fruits and Vegetables?		
Frequency Percen		
No	585	94.66
Yes	33	5.34

Is there documentation that patient was advised to Eat Fewer High Fat or High Cholesterol Foods?		
Frequency Percent		
No	550	89.00
Yes	68	11.00

Is there documentation that patient was advised to Reduce Sodium Intake?		
	Frequency	Percent
No	574	92.88
Yes	44	7.12

Is there documentation that patient was advised to Moderate Alcohol Intake?			
Frequency Percen			
No	209	33.82	
Yes	16	2.59	
N/A	393	63.59	

Is there documentation that patient was advised to Take Aspirin on a Regular Basis?		
	Frequency	Percent
No	562	90.94
Yes	56	9.06

What is the patient's Body Mass Index (BMI)?		
BMI*	Frequency	Percent
Unable to Calculate**	450	72.82
18.0 - 24.9	41	6.63
25.0 - 31.9	57	9.22
32.0 - 44.9	55	8.90
45.0+	15	2.43

<sup>\*</sup>BMI=weight(kg)/height(m)<sup>2</sup>
\*\*Due to the height and/or weight not being documented at visit.

## **Frequency of Health Site Interviews**

Please describe your clinical health site setting.			
Frequency Percer			
Community Health Center	1	2.08	
Hospital-based ambulatory clinic	1	2.08	
Multi-physician group practice outside of a hospital facility	36	75.00	
Solo practitioner	4	8.33	
Other	6	12.50	

Other responses to describe the clinical health site setting.		
Frequency Perc		
2 Physician Group	1	16.67
Family Practice Residency Program Clinic	1	16.67
Multi-Physician Hospital Facility	1	16.67
Residency Clinic and Faculty Clinic – Office Based	1	16.67
Specialty Physician Group	1	16.67
Teaching/Resident	1	16.67

Please indicate the types of providers that make up your health site group.			
	Frequency	Percent	
Family Medicine/Primary Care Physicians	40	30.08	
Cardiologists	10	7.52	
Pediatricians	5	3.76	
Obstetricians/Gynecologists	5	3.76	
Nurse Practitioners	18	13.53	
Physician Assistants	7	5.26	
Registered Nurses	21	15.79	
Registered Dietitians	3	2.26	
<b>Tobacco Control Specialists</b>	2	1.50	
<b>Exercise Specialists</b>	0	0.00	
Health Educators For Chronic Diseases*	5	3.76	
Other**	17	12.78	

<sup>\*</sup>Examples: CHF, COPD, Asthma, Diabetes, Hypertension, Hyperlipidemia, Smoking Cessation, Weight Control, Fitness, Internal Medicine, Oncology

How many physicians are in your practice?			
Frequency Percen			
Less than 5 physicians	21	44.68	
5-10 physicians	12	25.53	
11-20 physicians	5	10.64	
21-30 physicians	5	10.64	
More than 30 physicians	4	8.51	

<sup>\*\*</sup>Examples: Advance Practice Nurses, Internal Medicine, Pulmonology, Gasteroenterology, Oncology, LPN, Neurology, Endocrinology, Nephrology, Rheumatology, Orthopedics, Surgeons

What is the average patient load for your practice site per day?		
Frequency Percen		Percent
11 to 25 patients	2	4.26
26 to 50 patients	6	12.77
51 to 100 patients	19	40.43
Over 100 patients	20	42.55

What is your title?				
Frequency Percen				
<b>Medical Director</b>	2	4.17		
Practice Manager	18	37.50		
Other	28	58.33		

Other title categories.			
Frequency Percent			
Office Personnel*	12	42.86	
Administration**	5	17.86	
Medical/Clinical***	11	39.29	

<sup>\*</sup>Business Office Manager, Office Manager, Supervisor, Compliance Officer \*\*Clinic Administrator, Office Admin and Manager \*\*\* Clinic Director, MD, DON, RNP, Practicing Physician

How long have you worked at this site/facility?		
	Frequency Percent	
Less than a year	3	6.38
1-3 years	15	31.91
4-9 years	11	23.40
10-19 years	12	25.53
20+ years	6	12.77

Does your health site have a defined process or system of prompts to remind providers to include Physical Activity Assessment as part of cardiovascular disease prevention?

	Frequency	Percent
No	20	42.55
Yes	21	44.68
Don't Know	6	12.77

Does your health site have a defined process or system of prompts to remind providers to include Physical Activity Counseling as part of cardiovascular disease prevention?

	Frequency	Percent
No	25	53.19
Yes	16	34.04
Don't Know	6	12.77

Does your health site have a defined process or system of prompts to remind providers to include Nutrition Assessment as part of cardiovascular disease prevention?

	Frequency	Percent
No	19	40.43
Yes	24	51.06
Don't Know	4	8.51

Does your health site have a defined process or system of prompts to remind providers to include Nutrition Counseling as part of cardiovascular disease prevention?

	Frequency	Percent
No	25	53.19
Yes	18	38.30
Don't Know	4	8.51

Does your health site have a defined process or system of prompts to remind providers to include Weight Management Assessment as part of cardiovascular disease prevention?

	Frequency	Percent
No	19	40.43
Yes	25	53.19
Don't Know	3	6.38

Does your health site have a defined process or system of prompts to remind providers to include Weight Management Counseling as part of cardiovascular disease prevention?

	Frequency	Percent
No	25	53.19
Yes	18	38.30
Don't Know	4	8.51

Does your health site have a defined process or system of prompts to remind providers to include Tobacco Prevention/Cessation Assessment as part of cardiovascular disease prevention?

	Frequency	Percent
No	16	34.04
Yes	24	51.06
Don't Know	7	14.89

Does your health site have a defined process or system of prompts to remind providers to include Tobacco Prevention/Cessation Counseling as part of cardiovascular disease prevention?

	Frequency	Percent
No	20	42.55
Yes	21	44.68
Don't Know	6	12.77

Does your health site have a defined process or system of prompts to remind providers to include Lipid Profile Assessment as part of cardiovascular disease prevention?

	Frequency	Percent
No	11	23.40
Yes	32	68.09
Don't Know	4	8.51

Does your health site have a defined process or system of prompts to remind providers to include Lipid Counseling as part of cardiovascular disease prevention?

_	Frequency	Percent
No	14	29.79
Yes	28	59.57
Don't Know	5	10.64

Does your health site have a defined process or system of prompts to remind providers to include Hypertension Screening as part of cardiovascular disease prevention?

	Frequency	Percent
No	10	21.28
Yes	34	72.34
Don't Know	3	6.38

Does your health site have a defined process or system of prompts to remind providers to include Hypertension Counseling as part of cardiovascular disease prevention?

	Frequency	Percent
No	13	27.66
Yes	30	63.83
Don't Know	4	8.51

Does your health site have a defined process or system of prompts to remind providers to include Diabetes Screening as part of cardiovascular disease prevention?			
Frequency Percent			
No	14	29.79	
<b>Yes</b> 29 61.70			
<b>Don't Know</b> 4 8.51			

Does your health site have a defined process or system of prompts to remind providers to include Diabetes Management Counseling as part of cardiovascular disease prevention?			
Frequency Percent			
No	16	34.04	
Yes 28 59.57			
<b>Don't Know</b> 3 6.38			

If you answered 'Yes' to any of the previous 14 questions, please specify the system(s) that are utilized.		
	Frequency	Percent
Chart stickers/flags	12	16.67
Computer-automated reminder	10	13.89
Chart-based disease flowsheets/checklists	24	33.33
Chart-based physical examination forms	20	27.78
Other*	6	8.33

<sup>\*</sup>Examples: Dictation, Previous Review of Lab, Regular Education Sessions/Reminders for Physicians

What do you perceive as the top 3 barriers to providing preventative cardiovascular health counseling to patients at your health site?		
	Frequency	Percent
Lack of time during patient-provider encounters	25	18.25
Lack of non-clinical providers available for counseling	15	10.95
Lack of provider knowledge/competence about counseling	1	0.73
Patient disinterest	23	16.79
Lack of patient compliance	38	27.74
Insufficient or lack of reimbursement for counseling activities	24	17.52
Other*	11	8.03

<sup>\*</sup>Examples: lack of reimbursement for ruling out a diagnosis/screening for a cardiovascular disease and patient did not want to pay for extra services

automatically assessover 20 years old for	-	oatients (wit cardiovasc	thout CVD)
			Don't

	Yes	No	Don't Know
<b>Blood Pressure</b>	33 (70.21%)	13 (27.66%)	1 (2.13%)
Total Cholesterol	25 (53.19%)	17 (36.17%)	5 (10.64%)
HDL Cholesterol	24 (51.06%)	17 (36.17%)	6 (12.77%)
Smoking	25 (53.19%)	16 (34.04%)	6 (12.77%)
Diabetes	24 (51.06%)	17 (36.17%)	6 (12.77%)
BMI	11 (23.40%)	28 (59.57%)	8 (17.02%)

Does your health site have a system or policy to
automatically inform patients of their 10-year risk for
developing cardiovascular disease?

	Frequency	Percent
No	36	76.60
Yes	6	12.77
Don't Know	5	10.64

Once a patient is identified as having unhealthy cardiovascular risk behaviors (current smoker, lack of physical activity, poor nutrition/obese), does your health site have a system in place to follow-up on the individual's behavior change?

	Frequency	Percent
No	19	40.43
Yes	24	51.06
Don't Know	4	8.51

If yes to the above question, please specify the system.					
	Frequency	Percent			
Chart stickers/flags	4	11.76			
Computer-automated reminder to the patient's provider	5	14.71			
Office-generated letter to the patient encouraging cessation	4	11.76			
Office-generated letter to the patient describing available cessation resources	4	11.76			
Office-based follow-up system*	11	32.35			
Other**	6	17.65			

<sup>\*</sup>Examples: one-on-one visits with doctor to discuss test results and options, patient counseling and reassessment on follow-up, referral into patient education program

<sup>\*\*</sup> Examples: physician review of past chart notes, question and answer, update chart health history form

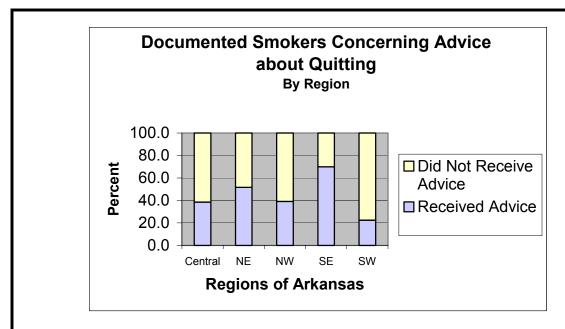
Does your health site have health educational materials (classes, videos, printed materials) available for the following:							
	Yes No Don't Kno						
Physical Activity	34 (72.34%)	8 (17.02%)	5 (10.64%)				
Nutrition for Cardiovascular Health	40 (85.11%)	5 (10.64%)	2 (4.26%)				
Weight Management for Cardiovascular Health	41 (87.23%)	4 (8.51%)	2 (4.26%)				
Tobacco Prevention/Cessation	36 (76.60%)	7 (14.89%)	4 (8.51%)				
Health Cholesterol Levels	41 (87.23%)	5 (10.64%)	1 (2.13%)				
Hypertension	41 (87.23%)	5 (10.64%)	1 (2.13%)				
Diabetes	42 (89.36%)	4 (8.51%)	1 (2.13%)				

Does your health site have a system in place to continuously assess and monitor patients' knowledge of the following:									
	Yes No Know								
Healthy Nutrition Behaviors	17 (36.17%)	23 (48.94%)	7 (14.89%)						
<b>Nutrition Practices</b>	19 (40.43%)	21 (44.68%)	7 (14.89%)						
Appropriate Physical Activity Recommendation	18 (38.30%)	22 (46.81%)	7 (14.89%)						
Physical Activity Practices/Patterns	16 (34.04%)	23 (48.94%)	8 (17.02%)						
Tobacco Use	18 (38.30%)	22 (46.81%)	7 (14.89%)						

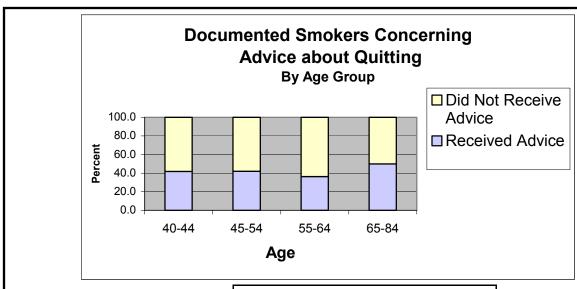
If you answered yes to any part of the above question, how is this done?					
	Frequency	Percent			
Provider evaluation during clinical encounters/office visits	19	73.08			
Patient survey filled out in the waiting room	5	19.23			
Mailed patient survey	0	0.00			
Other*	2	7.69			

<sup>\*</sup>Examples: normal patient check in procedures, schedule them to return and call a day before as a reminder

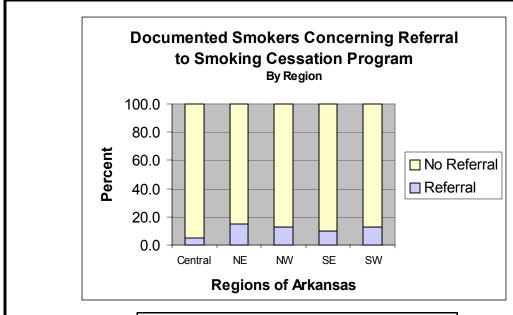
Does your health site have a defined process (e.g. registry or database) to identify all patients with known:								
	Yes No Don't Know							
Hypertension	22 (46.81%)	22 (46.81%)	3 (6.38%)					
Hyperlipidemia	22 (46.81%)	22 (46.81%)	3 (6.38%)					
Diabetes	22 (46.81%)	22 (46.81%)	3 (6.38%)					
Cardiovascular Disease	22 (46.81%)	22 (46.81%)	3 (6.38%)					



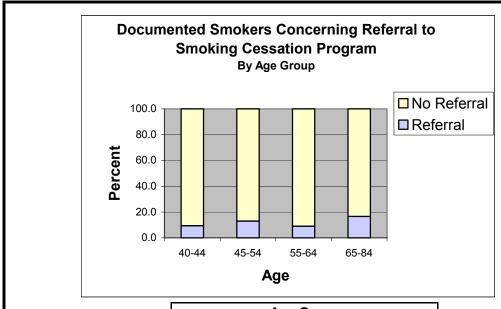
	<u>Region</u>						
Central NE NW SE S							
Received Advice	22	31	25	14	9		
Did Not Receive Advice	9 35 29 39 6 31						
Total	57	60	64	20	40		



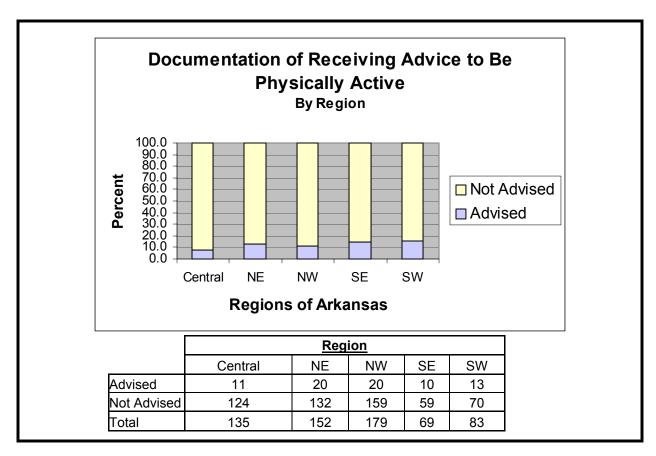
	Age Group				
	40-44	45-54	55-64	65-84	
Received Advice	49	45	4	3	
Did Not Receive Advice	68	62	7	3	
Total	117	107	11	6	

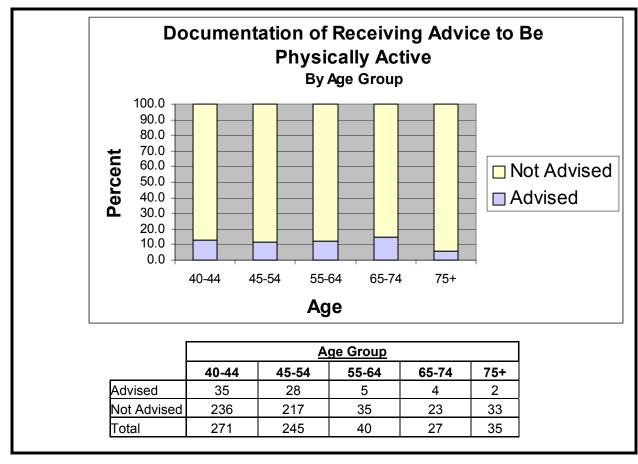


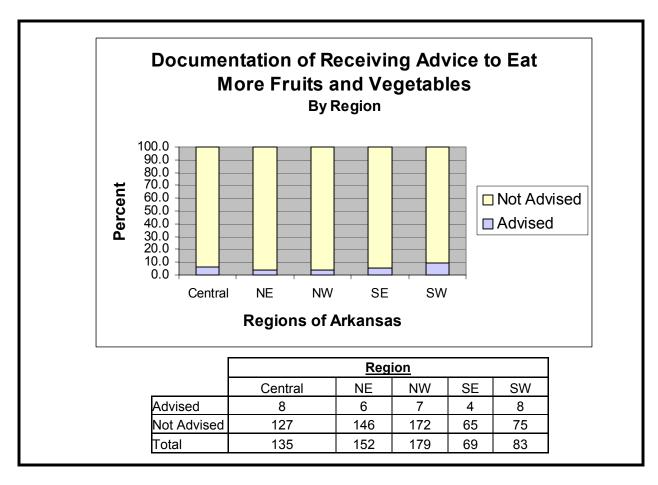
	<u>Region</u>				
	Central	NE	NW	SE	SW
Referral	3	9	8	2	5
No Referral	54	51	56	18	35
Total	57	60	64	20	40

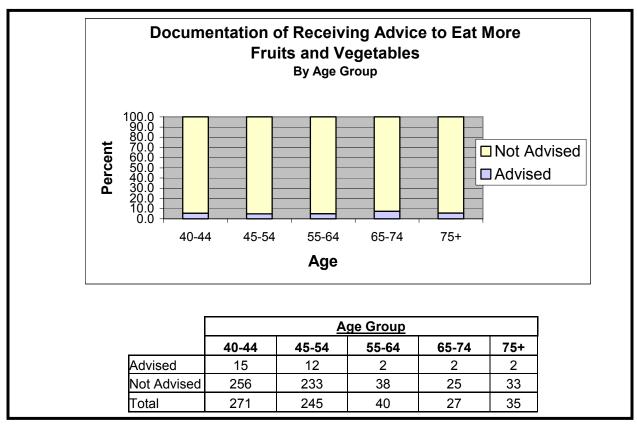


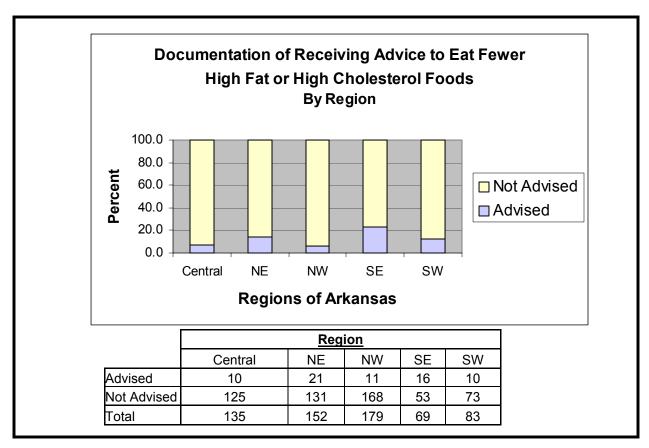
	<u>Age Group</u>					
	40-44	4 45-54 55-64 65-84				
Referral	11	14	1	1		
No Referral	106	93	10	5		
Total	117	107	11	6		

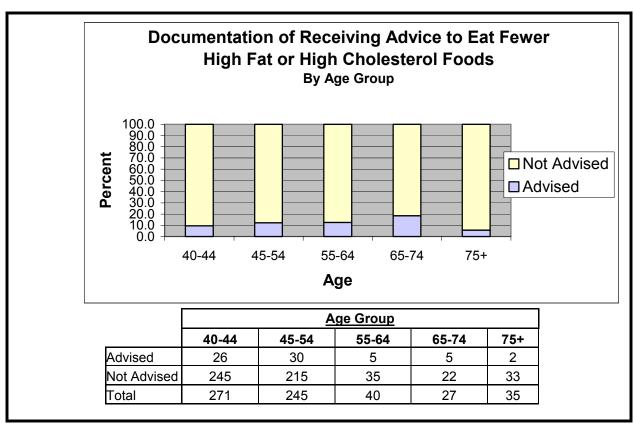












## Demographic and Regional Distribution of Cardiovascular Disease Prevention and Care Study:

Race	Recipients	Pct. of	Analyzable	Pct. of	Abstraction
	Population <sup>5</sup>	Total	Abstracts	Total	Rate <sup>6</sup>
White	384	60.86%	379	61.43%	98.70%
African-American	208	32.96%	202	32.74%	97.12%
Asian-American	17	2.69%	17	2.76%	100.00%
Spanish-American	8	1.27%	6	0.97%	75.00%
American Indian	1	0.16%	1	0.16%	100.00%
Other	5	0.79%	5	0.81%	100.00%
Unknown	8	1.27%	8	1.30%	100.00%
TOTAL	631	100.0%	618	100.0%	97.94%

Age	Recipients Population	Pct. of Total	Analyzable Abstracts	Pct. of Total	Abstraction Rate
	_			<del></del>	
40-44	275	43.58%	271	43.92%	98.55%
45-54	252	39.94%	245	39.64%	97.22%
55-64	40	6.34%	40	6.48%	100.00%
65-74	28	4.44%	27	4.38%	96.43%
75-84	26	4.12%	25	4.05%	96.15%
85+	10	1.58%	10	1.62%	100.00%
TOTAL	631	100.0%	618	100.0%	97.94%

Geographic	Recipients	Pct. of	Analyzable	Pct. of	Abstraction
Region	Population	Total	Abstracts	Total	Rate
Central	138	21.87%	135	21.84%	97.83%
N. East	154	24.41%	152	24.64%	98.70%
N. West	182	28.84%	179	29.01%	98.35%
S. East	71	11.25%	69	11.18%	97.18%
S. West	86	13.63%	83	13.45%	96.51%
TOTAL	631	100.0%	618	100.0%	97.94%

Gender	Recipients	Pct. of	Analyzable	Pct. of	Abstraction
	<b>Population</b>	Total	Abstracts	Total	Rate
Male	117	18.54%	116	18.80%	99.15%
Female	514	81.46%	502	81.23%	97.67%
TOTAL	631	100.0%	618	100.0%	97.94%

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<sup>&</sup>lt;sup>5</sup> This column represents the demographics of Medicaid's population for non-disabled 40 year olds or older, excluding pregnant women who had an office visit during July 1, 2001, and June 30, 2002.

<sup>6</sup> This column is based on the analyzable abstracts.

#### **Statistical analysis:**

The AFMC Office of Projects and Analysis performed the health site interview and chart abstraction analysis using Statistical Analysis System (SAS®) software.

#### **Arkansas Geographical Regions:**

<u>Northwest Region:</u> Baxter, Benton, Boone, Carroll, Crawford, Franklin, Johnson, Logan, Madison, Marion, Newton, Pope, Scott, Searcy, Sebastian, Van Buren, Washington, and Yell counties.

<u>Northeast Region:</u> Clay, Cleburne, Craighead, Crittenden, Cross, Fulton, Greene, Independence, Izard, Jackson, Lawrence, Mississippi, Poinsett, Randolph, Sharp, St. Francis, Stone, and Woodruff counties.

**Central Region:** Conway, Faulkner, Lonoke, Perry, Prairie, Pulaski, Saline, and White counties.

<u>Southwest Region:</u> Calhoun, Clark, Columbia, Dallas, Garland, Grant, Hempstead, Hot Spring, Howard, Lafayette, Little River, Miller, Montgomery, Nevada, Ouachita, Pike, Polk, Sevier, and Union counties.

<u>Southeast Region:</u> Arkansas, Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson, Lee, Lincoln, Monroe, and Phillips counties.

